



NORTH RIDGE ESTATES SUPERFUND SITE

KLAMATH FALLS, OR

**REMEDIAL
ACTION**

Season 3 Public Meeting

Tuesday, April 10, 2018

4:00 – 7:00 p.m.

Klamath County Library

126 South 3rd Street



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Meeting Agenda

- Introductions
- Quick Review of Asbestos
- Review of Seasons 1 and 2
- What to expect during Season 3
- Operations & Maintenance
- Real Estate Information
- Operable Unit 2 – Firing Range Status
- Address Questions
- Common Space Planning



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Introductions

- EPA Team
 - Linda Meyer (RPM)
 - Robert Tan (Assistant RPM)
 - Suzanne Skadowski (Public Relations)
- Oregon Department of Environmental Quality
 - Katie Robertson
- EA Engineering, Science, and Technology, Inc. (Contractor)
 - Sarah Babcock, Project Manager



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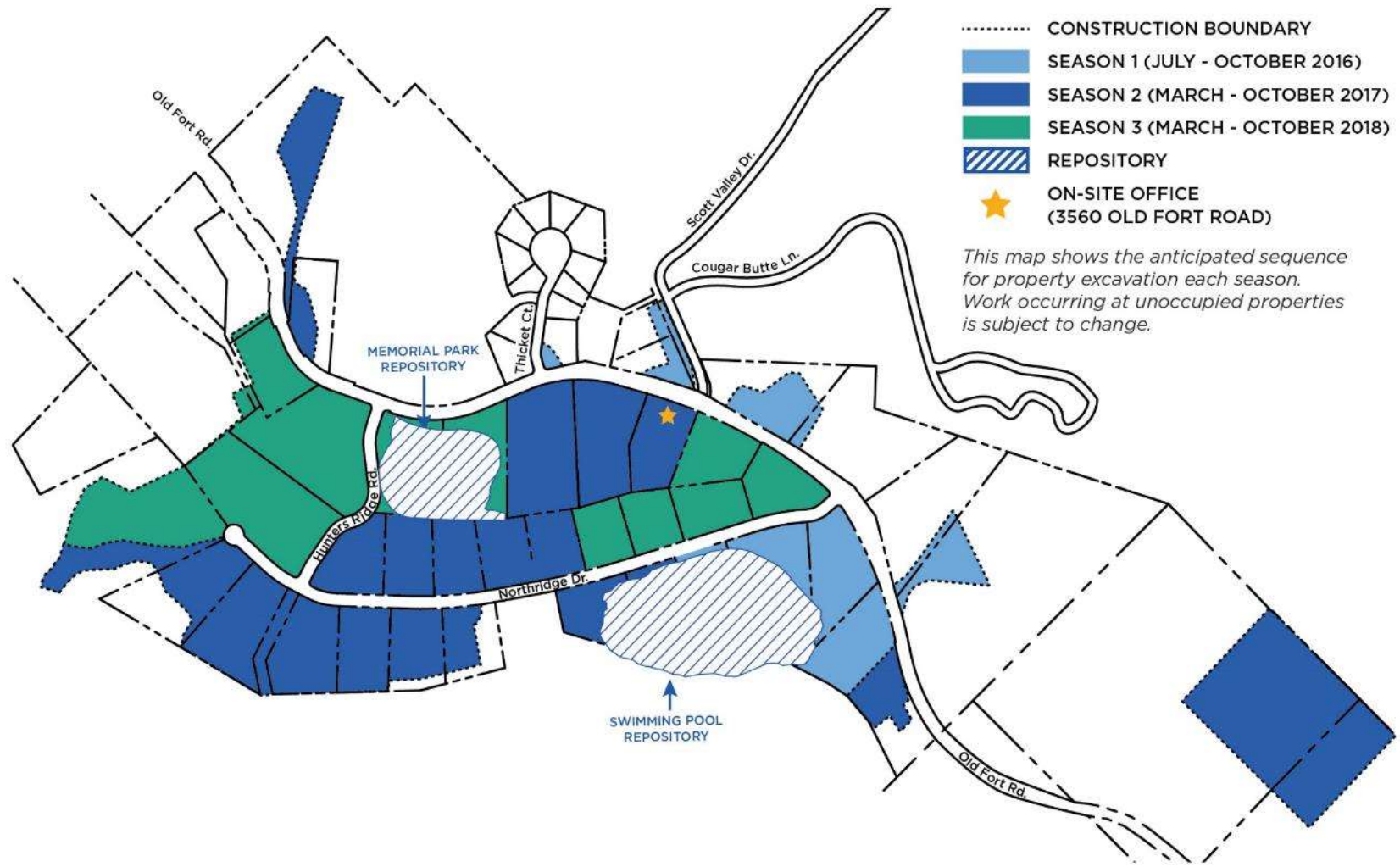
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- CONSTRUCTION BOUNDARY
- SEASON 1 (JULY - OCTOBER 2016)
- SEASON 2 (MARCH - OCTOBER 2017)
- SEASON 3 (MARCH - OCTOBER 2018)
- REPOSITORY
- ★ ON-SITE OFFICE
(3560 OLD FORT ROAD)

This map shows the anticipated sequence for property excavation each season. Work occurring at unoccupied properties is subject to change.





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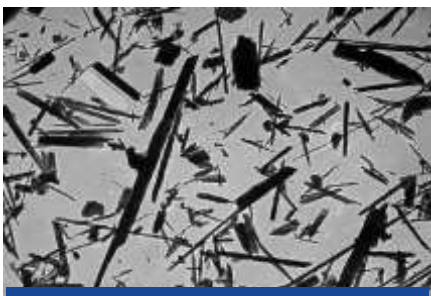
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What is Asbestos?

- Naturally occurring mineral (thin, separable fibers)
- Does not dissolve in water or evaporate
- Resistant to heat, fire, chemical & biological degradation
- Not broken down into other compounds
- Remain virtually unchanged over long periods of time (may break into more and shorter fibers)
- Can suspend in the air for long time and travel by wind or water for long distances



**Chrysotile –
Most Common**



Amosite Amphibole





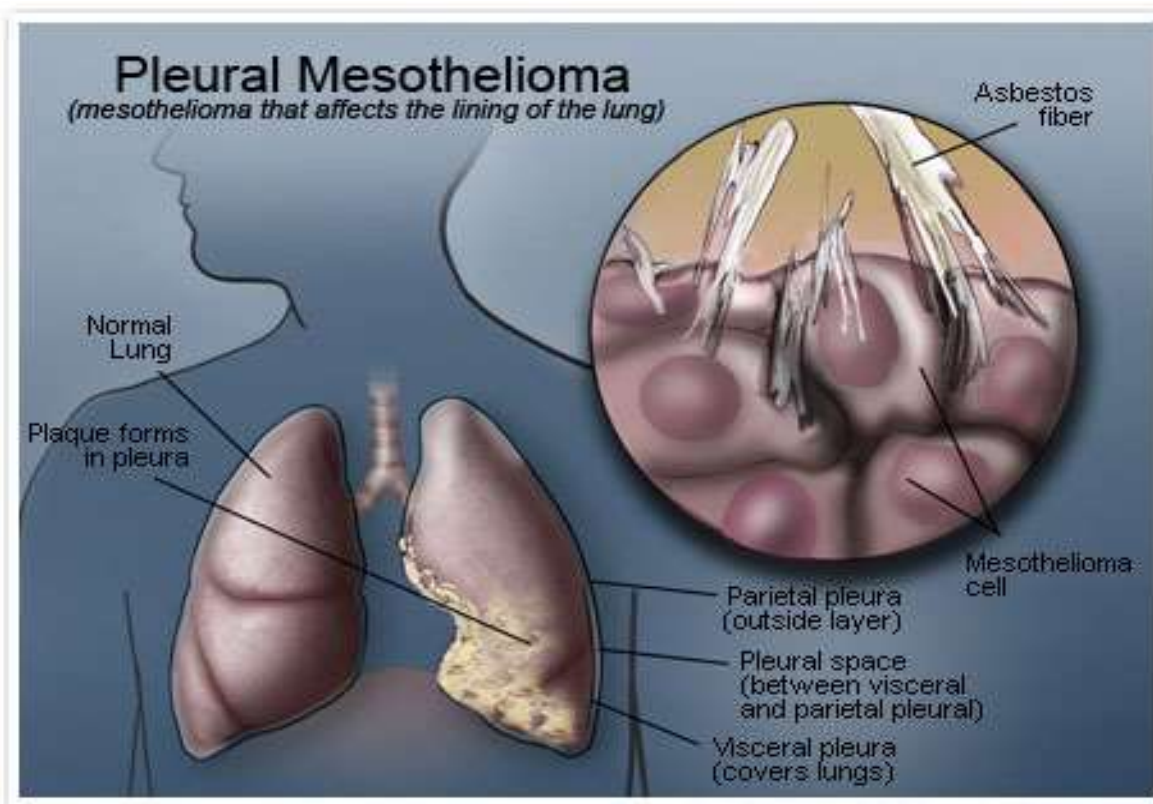
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Asbestos Health Risk

- Asbestos fibers are small and sharp
- Breathing fibers is primary cause of asbestos-related
- Embeds in lungs causing asbestosis, lung cancer and mesothelioma





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Overview of Season 1 (2016)

- Completion of excavation and restoration of 8 properties
- Installed 2 septic systems
- Excavated about 41,000 cubic yards
- Generated clean soil from local source
- Chipped trees for energy generation
- Put temporary cover on repository





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Overview of Season 2 (2017)

- Excavation and restoration of 12 properties; 9 partially complete
- Demolition of one house
- Installed 13 septic systems
- Excavated about 154,000 cubic yards
- Seeding and landscaping, deck replacement, paving
- Put temporary and partial final cover on repository





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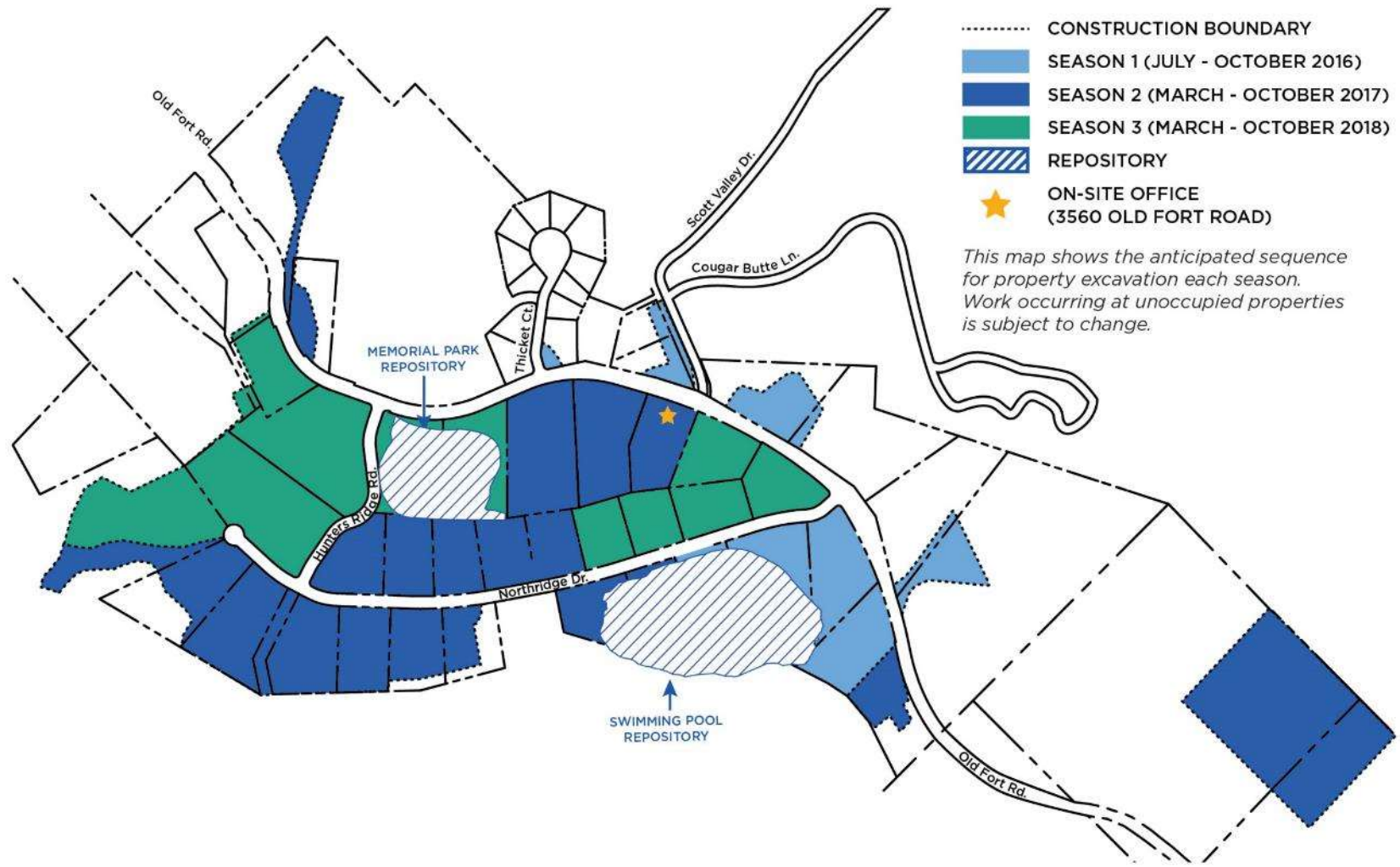
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(3560 OLD FORT ROAD)

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Winter Work

- Final tree cutting and clearing for Season 3
- Deck Demolition
- Pre-excavation surveys
- Moved offices



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Planning for Season 3

- Excavation and restoration of 11 properties
- Excavate about 115,000 cubic yards
- Open Memorial Park Repository
- Remove and replace North Ridge and Hunters Ridge Roads
- Install final septic systems
- Final cover on both repositories
- Seeding and landscaping, deck replacement, paving





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Planning for Season 3

- Similar haul roads to Season 2
- Continue to use Collman Dairy Road for clean backfill
- Some backfill coming from quarry on Old Fort Road
- Access closed on Jasma Lane for 2 months
- Removing overhead utilities during construction
- Schedule complete in November 2018
- Expect check-ins and repairs in 2019
- Receiver houses for sale





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Public Access / Traffic Safety

- Public access limited around work areas during construction hours
- Access controls: signage, flaggers, caution tape and construction fencing
- Traffic pattern changes with flagman – **please be safe**
- Construction zone speed reductions may be implemented – **please adhere to these**
- Mailboxes temporarily relocated to pull-off along Old Fort Road before North Ridge Drive



CAUTION
**AREA UNDER
CONSTRUCTION**



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Keeping Work Local

- North Wind Using Local Labor and Subcontractors:
 - 90% of labor
 - 95% of subcontractors
 - Supported the JTI program in the past
- EA Use of Local Subcontractors
 - 60% of labor from Oregon and Washington
 - 89% of subcontractor dollars from Oregon and Washington

Handout with lists of subcontractors for both North Wind and EA





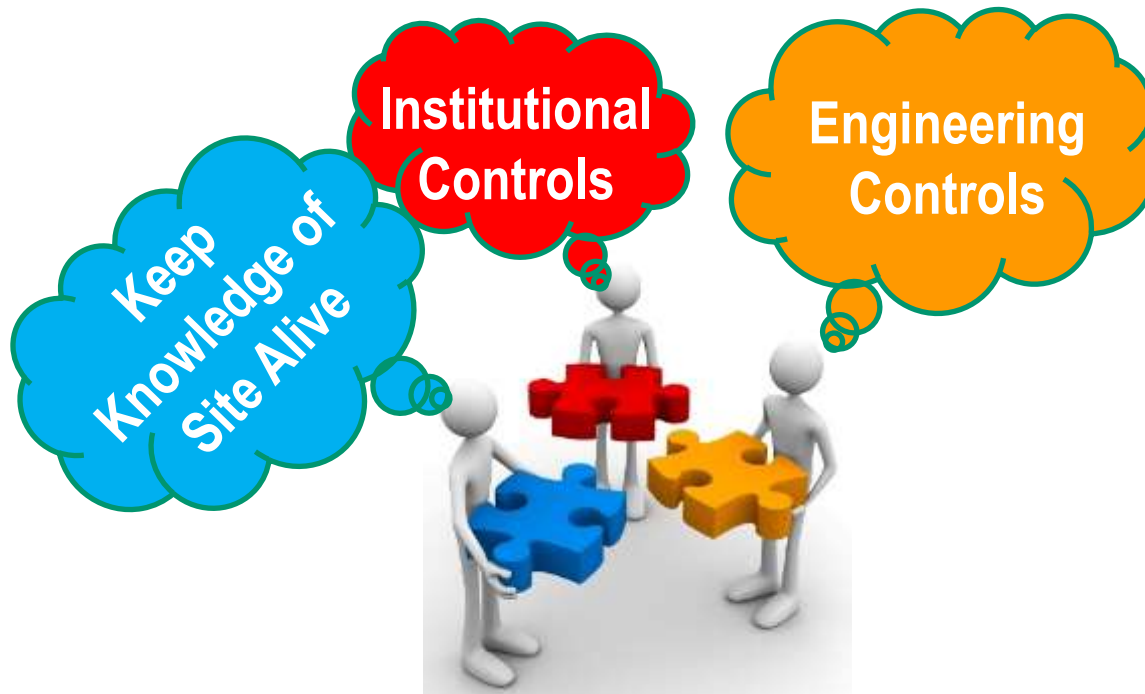
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What Happens After the Excavation Work is Done?

Operations & Maintenance Phase





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Engineering Controls

Engineering Controls are methods used to prevent or minimize exposure to hazardous substances. The primary Engineering Controls at NRE are:

- A 2 foot to 4 foot soil cap.
- Marker barriers for deeper contamination.
- Geotextile liners under porches & in crawlspaces.
- Houses, Driveway, & Roads.





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Protecting Engineering Controls

Multiple overlapping actions will be performed to make sure the engineering controls remain protective.

- Regular inspection of controls (i.e. the soil cap)
- ODEQ to maintain cap on the on-site repositories. Property owners to maintain caps on their properties.
- Klamath County Planning Dept. to flag properties with NRE in County Permitting Database.
- Potential for creation of NRE asbestos areas or info overlay in County GIS system maps.
- Institutional Controls.
- Education – Keeping Information Alive.



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Institutional Controls

Institutional Controls are legal or administrative tools or actions taken to reduce the potential for exposure to hazardous substances.

Institutional Controls at NRE include the following:

- **Easement & Equitable Servitude (deed restriction).** All Properties where excavation is performed will have a deed restriction. For partially excavated properties, the deed restriction will only apply to the excavated areas.
- **Notice of Environmental Contamination (deed notice)** Notices will only be placed on Thicket Court properties where steam pipe is present but has not been disturbed and no excavation work will be performed by EPA.

2012-005629
Klamath County, Oregon

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05/23/2012 02:26:31 PM

Space above this line for Recorder's use.

After recording, return to:
Oregon DEQ
475 NE Bellevue Drive, Suite 110
Bend, Oregon 97701-7415
Attn: Cliff Walkey

EASEMENT AND EQUITABLE SERVITUDE

This grant of Easement and acceptance of Equitable Servitude is made
May 18, 2012 between the North Ridge Estates Receivership, LLC, represented by
Daniel J. Silver ("Grantor") and the State of Oregon, acting by and through the Oregon
Department of Environmental Quality ("DEQ" or "Grantee").



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Easement & Equitable Servitude

“Engineering Control & Earthwork Restrictions. Except upon prior written approval from DEQ or other delegated entity, Owner may not conduct or allow operations or conditions on the Property or use of the Property that will or likely will penetrate the protective cap or jeopardize the protective cap’s function as an engineering control that prevents exposure to contaminated soil.

Owner does not need written approval from DEQ or other delegated entity for minor activities such as installation of fence posts, plantings, or other such activities that go no deeper than two feet below the ground surface and concludes with the protective cap being restored to original grade. Owner does not need written approval from DEQ or other delegated entity for activities performed under decks, porches, and crawlspaces that do not disturb geosynthetic liners or the soils beneath.”



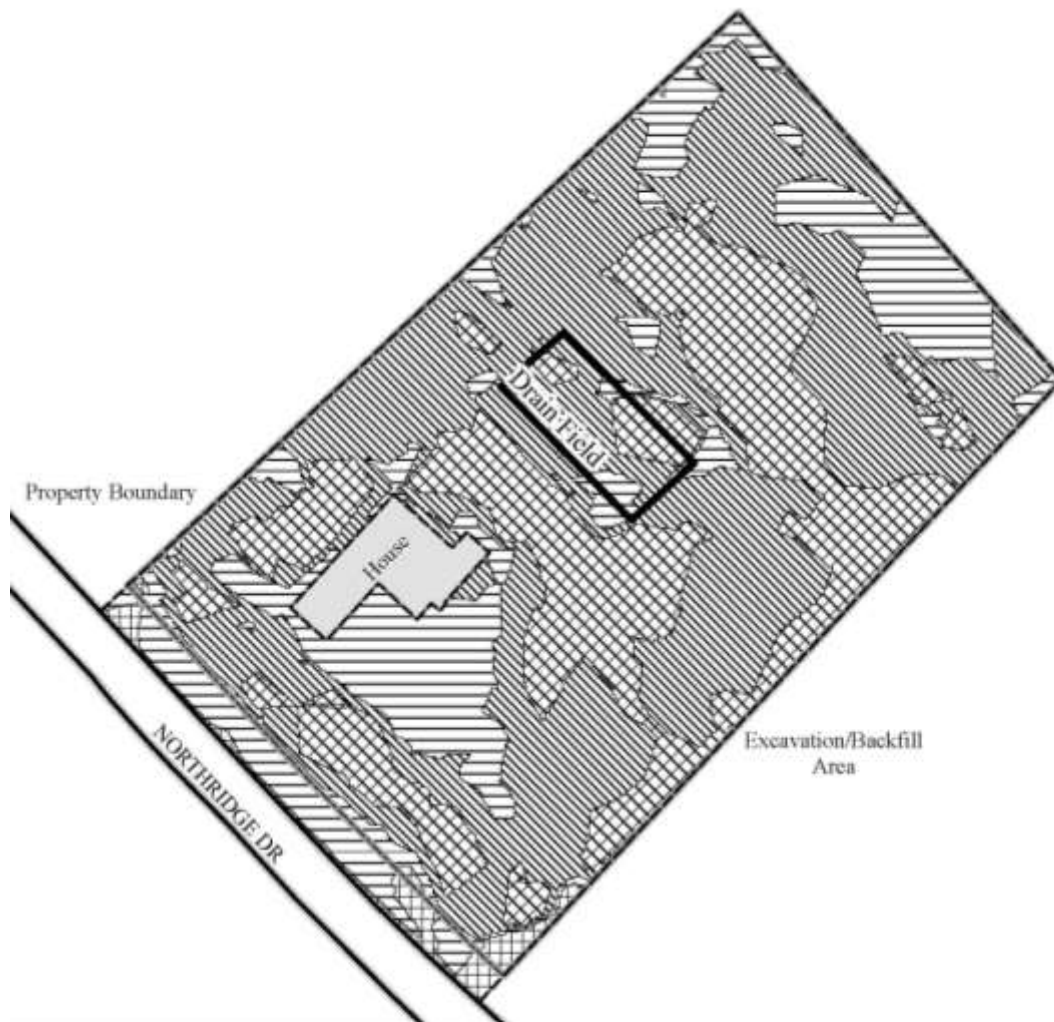
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Can I Build On My Property?

“Owner shall submit a *North Ridge Estates Earthwork Notification and Reporting Form* (example included as Exhibit D) to DEQ or other delegated entity at least 90 days prior to the date any ground disturbing (i.e. grading, trenching, digging) that will alter and/or reduce the thickness of the protective cap or penetrate below the protective cap except for emergencies, system failures, or time-critical repairs. Owner must receive written approval from DEQ or other delegated entity before proceeding with activities. DEQ or other delegated entity will make good faith efforts to review plans promptly so there are no undue delays. Owner must utilize an Oregon-licensed asbestos abatement company during any action that may disturb a contaminated area. DEQ shall determine if an Oregon-licensed asbestos abatement company is required based on the work to be performed and review of the Property As-Built drawing.”



Backfill Depth (ft)	
	2
	4
	< 1
	3
	> 4

NOT FOR CONSTRUCTION

NORTH RIDGE ESTATES SUPERFUND SITE
OPERABLE UNIT 1
US EPA REGION 10

Klamath County, Oregon



Protective Soil Cap Depth
Address: 3515 North Ridge Dr
Tax Lot: R-3809-015D0-02900



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Education & Information

Keeping the Knowledge Alive

Why?

- ❖ Buyers should always know what they are buying and make fully informed decisions! This is as important 50 years from now as it is today.
- ❖ Asbestos doesn't degrade and will never go away. The controls must always be maintained.

How?

DEQ's web page, annual fact sheets to residents, informational signs, and discussions during routine inspections.



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Public Information

DEQ's Environmental Cleanup Site Information (ECSI) database tracks each individual property.

WWW.Oregon.gov/DEQ

click on ECSI Database

Search Results for Environmental Cleanup Site Information as of 1/1/2017

The following 45 sites match your search criteria.

View the [Definition of Actions](#) list for brief descriptions of terms used in the S

Site ID/Info	Site Name
2335	North Ridge Estates Superfund Site
3325	NRE OU2 & Kingsley Firing Range Annex
5987	NRE Parcel AQ - 2720 Old Fort Rd
5988	NRE Parcel AP - 2840 Old Fort Rd
5989	NRE Swimming Pool Repository
5990	NRE Memorial Park Repository (Parcels L & MBK-D)
5991	NRE Parcel D - 3514 North Ridge Dr
5992	NRE Parcel C - 3508 North Ridge Dr
5993	NRE Parcel B - 3433 Hunters Ridge Rd
5994	NRE Parcel A - 3637 Hunters Ridge Rd
5995	NRE Parcel E - 3502 North Ridge Dr
5996	NRE Parcel F - 3440 North Ridge Dr

ECSI No. 2335 and this ECSI No. for a full understanding of environmental conditions.

General Site Information			
Site:	NRE Parcel AM - 3451 Old Fort Rd (ECSI Site ID: 6011)	CERCLIS (EPA) Id	001002476
Project Manager:	Kathleen Robertson	Investigative Status:	Contamination Suspected
PM Phone:	(541) 278-4620	NPL (National Priority Listing):	Yes
Address:	3451 Old Fort Rd Klamath Falls, 97601	Is this site an Orphan?	No
County:	KLAMATH	Is this site a brownfield?	No
Region:	Eastern Region	Action Underway or Needed:	Periodic Review
		Click for more details ...	

NOTE: This site has one or more long-term controls designed to manage site risks. [Click here](#) for details.

Site Documents

Click the link to view the document.

File Name	Category	File Size MB	Document Date	Upload Date
2335-EES-380915Dtx1000-Parcel-AM-08-14-2017.pdf	E&ES documents	3.1781	8/14/2017	9/28/2017
NRE-Earthwork-Notification-and-Reporting-Form-v.1-03-27-2017.pdf	Miscellaneous	0.1115	3/27/2017	3/30/2018
Map-Distribution-of-Contamination-Map.pdf	Site Diagrams	0.9423	1/1/2016	6/24/2016
Map-Parcel-Location-Map.pdf	Site Diagrams	1.0252	1/1/2016	6/24/2016
Map-Parcel-Status-Map.pdf	Site Diagrams	0.9485	1/1/2016	6/24/2016
Parcel-AM-Drawings-12-00-2015.pdf	Site Diagrams	1.1954	1/1/2016	6/24/2016
Parcel-AM-Depth-of-Protective-Soil-Cap-Figure-2016.pdf	Site Diagrams	0.1249	12/31/2016	9/28/2017
Parcel-AM-FINAL-AS-BUILT-PLANS-2016.pdf	Site Diagrams	1.1160	12/31/2016	12/5/2017

Site Links

Click the link to open the web page.

Link	Description
USEPA's North Ridge Estates Superfund Site web page	

Photographs

Click on the Photograph to see a larger version.



EPA lead RA work getting



Pre-excavation



Excavated Area



placing soil cap over



Septic system was replaced

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Receiver Property Sales

- The Receivership will begin selling homes as deed restrictions are filed with the county as this generally indicates all actions are complete.
- The first home is expected to be offered for sale in late summer with other homes offered when vacated by workers as the project wraps up.
- Most of the homes have been lived in recently. The Receivership will make modest repairs and improvements but for the most part homes will be sold as is.
- Jody Carter of Windemere is the realtor representing the Receivership. Homes pricing will be based on market conditions.
- The Receivership anticipates selling all of the homes by the end of 2019.





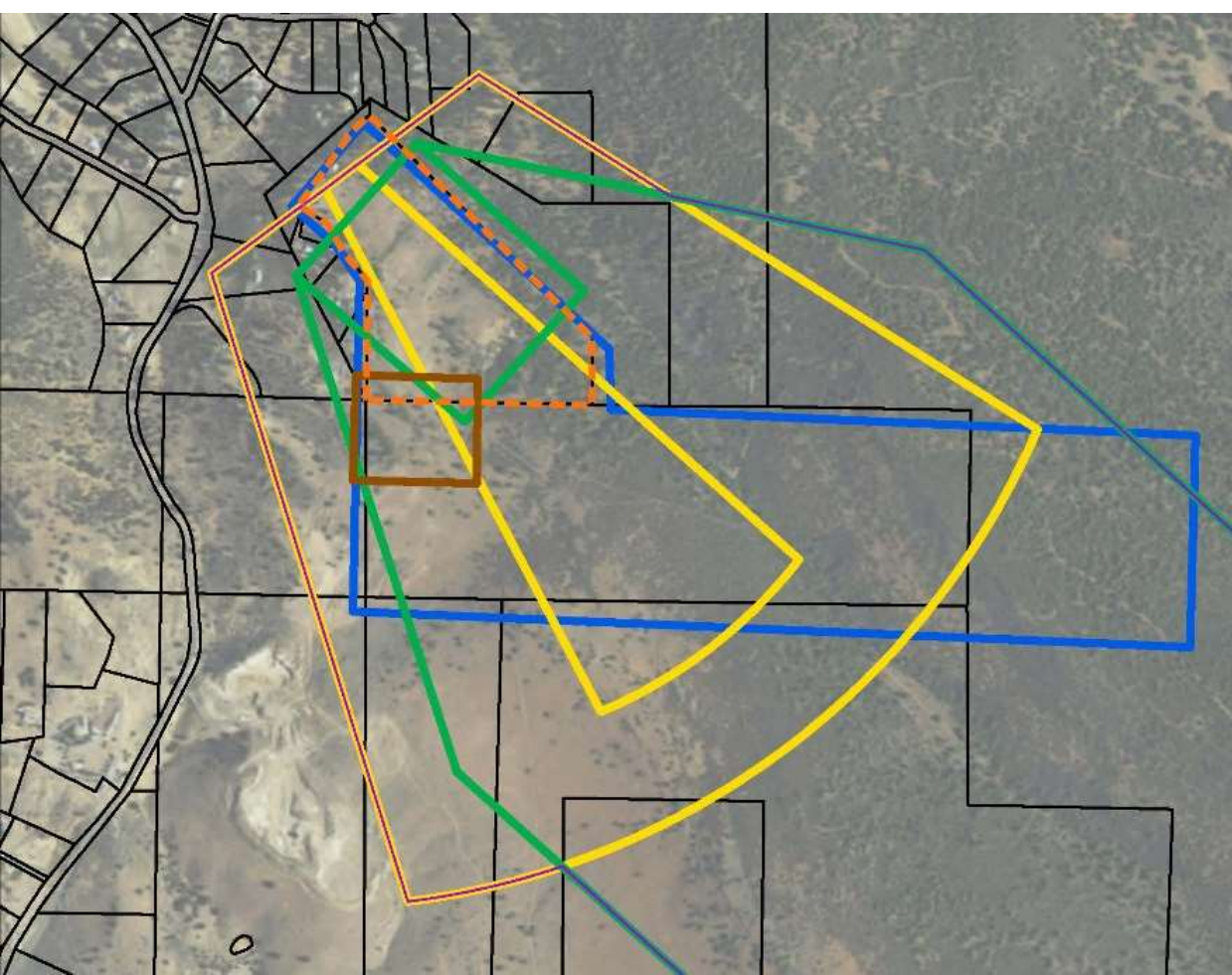
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Operable Unit 2 Former Firing Range

DEQ & USACE
Have Concurrent
Efforts Underway



Legend

OU2 - Firing Range

Klamath County Taxlot

Firing Range Site Features

Disposal Range

Rifle Range

Rocket Range

Kingsley Firing Range Annex
FUDS Boundary

Range Complex No. 1



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Project Contacts for Stakeholders

- EPA – Linda Meyer: 206-553-6636
- EPA – Robert Tan: 206-553-2580
- ODEQ – Katie Robertson: 541-278-4620
- EA Project Manager – Sarah Babcock: 303-929-8734
- EA Field Manager – Bill Hurley: 206-669-6489
- EA On-Site Contact – Susan Kettlewell: 541-274-1613



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Stay Informed

For more information:



Hotline: **(541) 238-5640**

On-call Site Phone: **(541) 274-1613**



E-mail: **NRESuperfund@gmail.com**



Website: **[www.epa.gov/superfund/
north-ridge-estates](http://www.epa.gov/superfund/north-ridge-estates)**

Sign up to receive project notices!

Information Distribution

- Project Specific Website • Information Hotline • Meetings • Events • Direct Mail
- Hand delivered and electronic notices • Media Coordination



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Questions and Open Discussion



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Common Space Design & Open Discussion

Oregon Department of Environmental Quality

– Katie Robertson

Galbraith and Associates, Inc.

– John Galbraith